**The Core and MORE Instruction Checklist**

|  |  |
| --- | --- |
| **The CCSS Standard: Numbers and Operations-Students mentally compute products of whole numbers.**  **The Envision Lesson: 3-2 Using Mental Math to Multiply** | |
| **EXPLICIT INSTRUCTION**  **I do it, We do it, Y’all do it, You do it** | **ENGAGEMENT**  **All Students Saying, Writing, Doing** |
| **PROACTIVE PLANNING** | **VOCABULARY WORDS** |
| Students may not be able to multiply by 10 or 100. We will prevent this failure by reviewing a simpler problem, then working up to the harder problem. We will know if it is working by students’ response on their whiteboards. | Factors, Product |
|  | |
| **ANTICIPATORY SET** (5 MINUTES) | |
| Spiral Review  Problem of the Day  Math Center | * Choral Responses * Partner Responses * Written Responses * Random call on students (No hand raising) |
| **BUILDING A FOUNDATION** (5-10 MINUTES) | |
| *The Language of Math*: Vocabulary instruction:   1. How will you explicitly teach new vocabulary? Review factors and product. Pre assess by writing the words product and factors on the board, ask the students if they can tell you in their own words what they mean. Also ask the students what operation uses these words. Have the students give you factors, and challenge them to find the product. 2. How will you provide multiple opportunities for vocabulary to be used in context? Write a multiplication problem on the board and have the students come up and circle the product and square the factors. You may present these problems in multiple forms. Have the students also write these problems, vocabulary words, and labels in their math journals. From this point forward be sure to use the words factor, and product (instead of using two numbers multiplied together to get an answer). | * Choral Responses * Partner Responses * Written Responses * Random call on students (No hand raising) |
| **WHOLE GROUP INSTRUCTION: Concrete** (10-15 MINUTES) | |
| *Develop the Concept: Interactive Learning (Hands-on)*  Each pair of students will receive one 100 block, ten 10’s strips, and ten single unit cubes. Tell the students that their task with their partner is to find as many different factors that will produce a product of 100. After the students have had a chance to explore with the manipulatives, gather the students back together and discuss the different factor combinations that they came up with. Ask shift questions (how did you come up with that answer). As you discuss the factors that the students came up with, have them record these compatible numbers in their journals. Use this time to establish what compatible numbers means. | * Choral Responses * Partner Responses * Written Responses   + Paper   + Math Journal   + Individual Whiteboards   + Student page from the topic pouch * Random call on students (No hand raising) |
| **SCAFFOLDED INSTRUCTION: Representational** (15-20 MINUTES) | |
| *Develop the Concept: Visual*  Each student will need a whiteboard and marker. Have the students each draw their own think bubble on their whiteboard. Tell the students that they will be showing you what they are thinking in their minds to solve the problem. Write a problem on your white board and have the students write the problem on their board and fill in their thinking bubbles. Once you have given the students time to write down their thinking process, have the students hold up their whiteboards. Browse through the classroom and look at the different thought processes that have occurred. Ask the students the higher level thinking questions at this point (how did you get that answer, did anyone do it differently, why. etc.). Repeat this process as needed. After this activity, have the students record how they solve these problems in their math journal. | * Choral Responses * Partner Responses * Written Responses * Random call on students (No hand raising) |
| **INDEPENDENT PRACTICE: ABSTRACT (**15-20 MINUTES) | |
| *Independent Practice* and *Problem Solving* Tell the students that they will be receiving a sheet of paper that consists of multiplication problems. You will need to pay close attention to the factors, and then solve for the product. Tell the students that the goal is to beat the clock and to find the easiest way to solve these problems. They will be given two minutes to complete the problems. After the two minutes are completed, gather the students back together and ask how they solved the problems. Make sure to acknowledge his or her ideas, but also ask if anyone else did it differently. If the students are having a hard time discussing how they solved their problems, direct/prompt the discussion towards using 10’s and 100’s to mental multiply, and to look for smaller problems inside the bigger problem. | * Choral Responses * Partner Responses * Written Responses * Random call on students (No hand raising) |
| **FORMATIVE ASSESSMENT** (5-10 MINUTES) | |
| For lower functioning students have them complete: assign these students five simpler problems with one digit factor multiplied by a two-digit factor (20x8). For medium functioning students have them complete: Assign these students five problems using two factors (300x2000) For higher functioning students have them complete: Assign these students five problems using three factors with compatible numbers (25x3x4) | |
| **CENTER ACTIVITIES** (15 - 45 MINUTES)  \*This part of the lesson is beneficial for providing engaging activities while the teacher works with small groups of students who need supplemental instruction. | |
|  | |
| **HOMEWORK** | |
| Send home two copies of the Envision 3-2 Practice sheet. Have the students complete numbers 1-12 at home as a competition with a parent, sibling, or friend. The goal is to try to complete the problems first. | |